typical strabismus, search should be made for a neurosis when subject symptoms are present. The smaller the degree of strabismus and the more prominent the intensity of the subjective complaints, the greater conservatism should be exercised in regard to operation. If operation is insisted upon, the patient should be informed of the uncertainty of the result and of the possibility of the appearance and continuance of diplopia after operation. Finally, in spite of all precautions and care, there will be occasional unavoidable failures; the number will become smaller in proportion as the manifold factors in the etiology of strabismus, which form the basis for rational therapy, become more exactly defined.

Dust-like Opacities in the Vitreous.—STRAUB, before the Ophthalmological Society of the United Kingdom (*Amer. Jour. Ophthal.*, February, 1912, p. 54) argued that inflammation of the vitreous body, for which he proposed the name "hyalitis," should be recognized as an independent affection. He injected into the vitreous body of the rabbit some pathogenic microbes. These microbes grew there and there only and attracted to the vitreous body serum and leukocytes, both of which latter were derived from the vessels of the ciliary body, but this did not constitute cyclitis. When pathogenic microbes were injected into the ciliary body itself, a real cyclitis, quite different from the hyalitis which occurred in the first experiment, was produced. As the two forms can be distinguished in the laboratory, the same distinction should also be made clinically. But this has not yet been done. The text-books state that the ciliary body pours out its exudate into the vitreous, but this is a mistake, as leukocytes do not allow themselves to be poured out. Metchnikoff has said that leukocytes only went where they were attracted by chemotactic bodies. When there were microbes in the vitreous those substances went toward the vitreous body; when microbes were in the ciliary body the leukocytes went to the ciliary body. He also felt sure that the vitreous body obtained no leukocytes from the cornea; in inflammation of the vitreous body the leukocytes come from the vitreous body.

PATHOLOGY AND BACTERIOLOGY

UNDER THE CHARGE OF

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Immunity Transmission from Mother to Offspring.—It has been well established that passive transmission of antibodies from mother to offspring occurs, and to determine if this happens chiefly by way of the placenta or through the milk. L. W. FAMULENER (*Jour. of Infect. Diseases*, 1912, vol. x., No. 3) has undertaken some careful experimentation, making use of hemolysins. It has been determined with all but certainty that hemolysins could be transmitted through the placenta to the fetus, but, on the other hand, many fetuses from abortions failed to show such hemolysins. From Famulener's work, as well as that of others, it appears that goats, highly immunized against sheep erythrocytes at a late period of gestation, transmit the specific antibodies to the suckling, and this not so much by the placenta as by the colostrum, much less so by the milk. Especially when immunization has been done during the period of gestation is the colostrum powerful in this regard, even more so than the blood serum. If the mother were immunized after the birth of the young, the sucklings failed to gain any demonstrable immuniity. Even though the colostrum be rich, the milk may not be so, and often the hemolytic antibodies disappear rapidly from the latter. It must be stated, also, that a very high degree of immunity is necessary in the parent animal before appreciable amounts of antibodies are excreted by way of the milk.

A Suggested Explanation of the Apical Lesion in Tuberculosis.—As a result of their work upon the relation of animal fat to tubercle bacillus fat, WM. CHARLES WHITE and A. MARION GAMMON (*Jour. of Med. Research*, June, 1912, vol. xxvi, No. 2) bring forward a reasonable suggestion of the frequency with which pulmonary tuberculosis attacks the apices of the lungs. By adding to culture media of various kinds fats sufficiently fluid to mix, it was found that the growth of the bacilli was greatly enhanced, even to hundreds of times as abundant a growth as that upon the simple media. Still more striking was the effect if the fat were acted upon by liver extract, so that split products of the fats were obtained. Leather had shown that the fats stored in the tissues in general are mobilized in the liver, and there prepared for use by other organs of the body. The liver-altered fat is poured into the inferior vena cava and thence into the pulmonary system. In the pulmonary artery, just before the division into the right and left branches, a great bag of blood is formed, "the blood in this portion must move with comparative slowness," and the light fatty compounds have a chance to rise in this blood, and at the highest point of this stream the vessel arises which supplies the apex of each upper lobe; so that the fat laden blood of the apex of the lung, with its qualities as a culture mediun thus increased, tend to the greater liability of the apex to become the seat of infection.

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